

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE ON

In re the Application of:

Naomasa SHIRAISHI

Appln. No.:

Filed: HERewith

For: PROJECTION EXPOSURE APPARATUS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

Applicant wishes to make of record the documents cited in predecessor Application Nos. 10/202,007 filed July 25, 2002, 09/246,853 filed February 9, 1999, 08/549,325 filed October 27, 1995, 08/371,895 filed January 12, 1995, and 07/942,193 filed September 9, 1992, whether cited by Applicant or by the Patent Office. The documents are listed on the attached Forms PTO-1449.

Applicant's Japanese Representative has provided the attached comments regarding the relevance of Documents AM-AO (page 13 of 14).

Respectfully submitted,

By: Nelson H. Shapiro
Nelson H. Shapiro
Reg. No. 17,095

NHS:lmb

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January 20, 2004

(1) JP 56-12615

This reference discloses a microscope having an annular aperture stop. The microscope is provided with an annular filter at a position conjugate with the annular aperture stop to block a part of the 0-th order diffracted light.

(2) JP 58-16214

This reference discloses an annular illumination device for use in a microscope or the like. It teaches to use an optical element having a conic surface to form an annular light source image. As shown in its Fig. 2, a conical prism 6 is used to form an annular light source image 8 on an aperture of an annular aperture stop 5. Furthermore, as shown in Fig. 3, this reference teaches to enlarge the size (or diameter) of the annular light source image 8 by arranging the conical prism near a collector lens 2 and using an imaging lens 9 having a longer focal length instead of an imaging lens 7 in Fig. 2.

(3) JP 59-49514

This reference discloses an annular illumination device for use in a microscope or the like. It teaches providing a first optical member for shaping a light flux from a light source into a cylindrical light flux (i.e. a light flux with a circular cross section) and a second optical member for converting a cylindrical light flux into an annular light flux.

(4) JP 1-295215

This reference disclose an illumination device in which a light flux from a light source is made incident on a reflecting member at a predetermined angle so that a plurality of light source images are formed. Namely as shown in its Fig. 1, a coherent light from a laser source 1 is incident on a incident surface 9a of a square pillar member 9 via a scanning optical device 20 so that the coherent light is reflected by the inner surface of the square pillar device so as to exit from an exit surface 9b.

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| | AN | 61-91662 | 5/9/86 | Japan | | | yes |
| | AO | | | | | | |
| | AP | | | | | | |
| | AQ | | | | | | |
| OTHER (including author, title, date, pertinent pages, etc.) | | | | | | | |
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| <u>LIST OF DOCUMENTS CITED BY APPLICANT</u> | | | | Applicant Naomasa SHIRAISHI | | | |
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| OTHER (including author, title, date, pertinent pages, etc.) | | | | | | | |
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| | AQ | | | | | | |

OTHER (including author, title, date, pertinent pages, etc.)

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